Application Number 09/851,363
Amendment in Response to final Office Action mailed July 23, 2007

REMARKS

This Amendment is being filed with a request for continued examination (RCE) and constitutes the required submission. This Amendment is responsive to the Final Office Action dated July 23, 2007. Applicant has amended claims 1, 6-8, 10, 13, 14, 16, 19-21, 23, 24, 27, 30, 32, 39, 40, 47, 52, 53, 58, 61, 62, 63, 70, 71, 77, 79, 81-85; canceled claims 4, 5, 9, 18, 22, 35-38, 45, 49-51, 59, 74-76; and added new claim 86. Claims 3, 34, 72 and 73 were previously canceled. Claims 1, 2, 6-8, 10-17, 19-21, 23-33, 39-44, 46-48, 52-58, 60-71 and 77-86 are now pending.

Applicant has amended all pending claims to clarify aspects of the invention. Among other things, all pending claims now generally require, e.g., that the interface card concentrator (or packet processing circuit) receives the data packets from at least two of the interface cards, wherein contents of the received data packets are stored in memory, wherein the memory management circuit generates notifications based on keys of the received data packets and forwards the notifications to the route lookup circuit (or system control module), wherein the route lookup circuit (or system control module) performs route lookups for the data packets based on the keys in response to the notifications, and wherein the packet processing circuit sends the data packets from the memory to the interface cards as output bound packets based on the route lookups performed by the route lookup circuit (or system control module) in response to the notifications.

The current amendments clarify one of the useful aspects of the single board concept, e.g., in which the interface card concentrator, the memory management circuit and the route lookup circuit are integrated into a single unit. In particular, the claimed invention can exploit notifications generated based on keys of the received data packets, and use a common memory without requiring the entire data packets to be transmitted between different units or circuit boards.

The applied prior art fails to suggest such features. To be sure, in the primary reference cited by the Examiner, Fan et al (US 6,643,269), the content of each packet is transferred between the various functional units. Accordingly, Fan et al. fails to suggest the use of notifications that are generated based on keys of the received data packets, and fails to exploit a memory in a manner that avoids the need to transmit the entire content of the packets between

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different units. None of the secondary references overcomes this fundamental deficiency of Fan et al. relative to Applicant's claims.

In view of the claim amendments, Applicant believes that all claims in this application are in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date: By:

October 30, 2007
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